Remarks

Claims 2-3, 5-17 and 19-26 are pending in the present application. By this reply, claim 18 has been cancelled and new claims 19-26 have been added. Claims 2, 9, 22 and 24 are independent.

The specification and claims have been revised to correct informalities and to clarify the invention according to U.S. practice. These modifications do not add new matter.

35 U.S.C. § 112, second paragraph, Rejection

Claims 9-18 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. To overcome this rejection, the "wherein" clause in claim 9 has been separated from the recitation of the analog transmission terminal. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

35 U.S.C. § 102 and 103 Rejection

Claims 2, 3 and 5-16 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Carr et al. (U.S. Patent No. 5,608,446). Claims 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Carr et al. (U.S. Patent No. 5,608,446). These rejections, insofar as they pertain to the presently pending claims, are respectfully traversed.

Carr et al. is directed to a system which allows the transmission of information over a low-speed data channel or a high-speed data channel. For instance, as shown in Figure 1 of Carr et al., information from an enhanced service provider 10A... or 10N is transmitted over a digital network channel 16 to a router 42. The control processor 48 can check the quantity of the information to be transmitted and controls the router 42 to either transmit the information over the low-speed channel 26 (to a PSTN 24), or over the high-speed channel 28 (to the cable head-ends 30). The modems 54 and the modulators 46 transform the digital data packets into analog form. Therefore, in Carr et al., there is no transmitting the OSD through either an analog connection or a digital connection depending on the volume of the OSD, as recited in independent claim 2; and there is no transmitting the OSD over either a digital terminal or an analog terminal depending on the size of the OSD, as recited in independent claim 9.

On page 4 of the last Office Action, the Examiner states that the determining and transmitting steps of claim 2 are met by the control processor 48 of Carr et al. However, the process of determining which route to use to transmit the information involves selecting either the high-speed channel 26 or the high-speed channel 28, which are both analog channels in which information is transmitted in analog form. This is also acknowledged by the Examiner in the last Office Action on page 7, where the Examiner equates "an analog transmission terminal" in claim 9 to the cable distribution head-end 30 connected to the high-speed channel 28.

Furthermore, regarding independent claim 2, the feature of transmitting the OSD in digital form if the volume of the OSD is not larger than the certain volume is not anticipated by Carr et al. In Carr et al., if the volume of data to be transmitted is large, then the high-speed channel is used, whereas if the volume is small, then the low-speed channel is used, so that the information can be transmitted quickly. In contrast, in Applicants' embodied invention, if the volume of the OSD is large then the OSD is transmitted in analog form whereas if the volume is small, then the OSD is transmitted in digital form. This allows the OSD to be transmitted in real time even if the volume of the OSD is large by using the analog transmission and freeing up the digital channel for the AV contents.

Moreover, although Carr et al. discloses that information from the service providers is transmitted to the customer premise equipment 20, Carr et al. does not specify anywhere that the information is an OSD, which is a well known term in the art that has a specific meaning. Therefore, there is no OSD in Carr et al.

In addition, in Carr et al. the information is transmitted over the low speed channel 26 to the PSTN, or over the high speed channel 28 to the cable head end 30. In clear contrast, in Applicants' embodied invention, the OSD is transmitted to one source (a switching unit) whether the OSD is transmitted over an analog or digital terminal/connection.

Therefore, Carr et al. fails to teach or suggest, *inter alia*:

> determining whether the volume of the OSD is larger than a certain volume, and if so transmitting the OSD in analog form to a switching unit through an analog connection, and if the volume of the OSD is not larger than the certain volume, transmitting the OSD in digital form to the switching unit through a digital connection

as recited in independent claim 2.

> said first controlling unit...compares a size of the needed OSD to a preset size, and based upon the comparison, transmits the OSD over one of the digital transmission terminal or the analog transmission terminal to a switching unit

as recited in independent claim 9.

Furthermore, there is no motivation to modify Carr et al. to render these claims obvious since none of the prior art of record teaches the missing features.

Accordingly, the invention as recited in independent claims 2 and 9 and their dependent claims (due to their dependency) is patentable over the applied reference, and the rejections are improper and should be withdrawn.

New Claims

Claims 19-21 depend from independent claim 2 and are thus allowable at least for the same reasons that claim 2 is allowable as discussed here above. Claim 22-26 contain similar subject matter as other claims and are thus believed to be allowable over the prior art of record. Indication of allowance of these new claims is respectfully requested.

Conclusion

For the foregoing reasons and in view of the above clarifying amendments, Applicants respectfully request the Examiner to reconsider and withdraw all of the objections and rejections of record, and earnestly solicit an early issuance of a Notice of Allowance.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong (Registration No. 40,953) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Esther H. Chong
Esther H. Chong, #40,953

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

EHC:sld